CLAIMS

What is claimed is:

1. An apparatus to output different display identification data depending on a connector type, comprising:

an analog display identification data storing and outputting unit which stores predetermined analog display identification data and outputs the stored analog display identification data to a predetermined system when a command to output the analog display identification data is issued;

a digital display identification data storing and outputting unit which stores predetermined digital display identification data and outputs the stored digital display identification data to the predetermined system when a command to output the analog display identification data is issued;

a connector type identification unit which identifies a connector type based upon an output of pins of a predetermined connector; and

a display identification data output command unit which commands one of:

the analog display identification data storing and outputting unit, and
the digital display identification data storing and outputting unit,
to output one of:
the analog display identification data, and
the digital display identification data,

to the predetermined system based upon an identified connector type.

2. The apparatus of claim 1, wherein the analog display identification data and the digital display identification data have a predetermined structure according to extended display identification data (EDID) specifications of the Video Electronics Standards Association (VESA).

3. The apparatus of claim 1, wherein the predetermined connector is a DVI connector.

4. The apparatus of claim 3, wherein the connector type identification unit identifies the DVI connector as one of a DVI-A-type, a DVI-D-type, and a DVI-I-type connector based on the output of pins of the DVI connector.

5. The apparatus of claim 4, wherein the connector type identification unit comprises:

a DVI-A-type identifier which identifies the DVI connector as a DVI-A-type connector when an output of a 22nd of the DVI connector of a Terminal Display Management System clock ground is at a high impedance and an output of a C5-th pin of the DVI connector of an analog ground is at a ground level;

a DVI-D-type identifier which identifies the DVI connector as a DVI-D-type connector when the output of the 22nd of the DVI connector of the Terminal Display Management System clock ground is at a ground level and the output of the C5-th pin of the DVI connector of the analog ground is at a high impedance level; and

a DVI-I-type identifier which identifies the DVI connector as a DVI-I-type connector when the output of the 22nd of the DVI connector of the Terminal Display Management System clock ground and the output of the C5-th pin of the DVI connector of the analog ground are at a ground level.

6. The apparatus of claim 4, wherein the display identification data output command unit comprises:

an analog display identification data output commander which commands the analog display identification data storing and outputting unit to output the analog display identification data when the DVI connector is identified as a DVI-A-type connector by the connector type identification unit; and

a digital display identification data output commander which commands the digital display identification data storing and outputting unit to output the digital display identification data when the DVI connector is identified as a DVI-D-type connector by the connector type identification unit.

7. The apparatus of claim 6, wherein the analog display identification data output commander commands the analog display identification data storing and outputting unit to output the analog display identification data according to predetermined additional information when the DVI connector is identified as a DVI-I-type connector by the connector type identification unit.

8. The apparatus of claim 7, wherein the additional information indicates that the analog display identification data is to be output according to a user selection.

9. The apparatus of claim 6, wherein the digital display identification data output commander commands the digital display identification data storing and outputting unit to output the digital display identification data according to predetermined additional information when the DVI connector is identified as a DVI-I-type connector by the connector type identification unit.

10. The apparatus of claim 9, wherein the predetermined additional information indicates that the digital display identification data is to be output according to a user selection.

11. A method to output different display identification data depending on a connector type, comprising:

storing predetermined analog display identification data;

storing predetermined digital display identification data;

identifying the connector type based upon an output of pins of a predetermined connector;

issuing a command to output one of the predetermined analog display identification data and the predetermined digital display identification data depending on the identified connector type;

outputting the stored predetermined analog display identification data in response to the command to output the stored predetermined analog display identification data; and

outputting the stored predetermined digital display identification data in response to the command to output the stored predetermined digital display identification data.

12. The method of claim 11, wherein the stored predetermined analog display identification data and the stored predetermined digital display identification data have a predetermined structure according to extended display identification data (EDID) specifications of the Video Electronics Standards Association (VESA).

13. The method of claim 11, wherein the predetermined connector is a DVI connector.

14. The method of claim 13, wherein the identifying the connector type based upon the output of pins of the predetermined connector comprises identifying the DVI connector as one of a DVI-A-type, a DVI-D-type, and a DVI-I-type connector based on the output of pins of the DVI connector.

15. The method of claim 14, wherein the identifying the connector type based upon the output of pins of the predetermined connector comprises:

identifying the DVI connector as a DVI-A-type connector when the output of a 22nd of the DVI connector of a Terminal Display Management System clock ground is at a high impedance and the output of a C5-th pin of the DVI connector of an analog ground is at a ground level;

identifying the DVI connector as a DVI-D-type connector when the output of the 22nd of the DVI connector of the Terminal Display Management System clock ground is at a ground level and the output of the C5-th pin of the DVI connector of the analog ground is at a high impedance level; and

identifying the DVI connector as a DVI-I-type connector when the output of the 22nd of the DVI connector of the Terminal Display Management System clock ground and the output of the C5-th pin of the DVI connector of the analog ground are at a ground level.

16. The method of claim 14, wherein the issuing the command to output one of the predetermined analog display identification data and the predetermined digital display identification data depending on the identified connector type comprises:

issuing the command to output the analog display identification data when the DVI connector is identified as a DVI-A-type connector by the connector type identification unit; and issuing a command to output the digital display identification data when the DVI connector is identified as a DVI-D-type connector by the connector type identification unit.

17. The method of claim 16, wherein the issuing the command to output the analog display identification data when the DVI connector is identified as the DVI-A-type connector by the connector type identification unit comprises issuing the command to output the analog display identification data according to predetermined additional information when the DVI connector is identified as the DVI-I-type connector.

18. The method of claim 17, wherein the predetermined additional information indicates that the analog display identification data is to be output according to a user selection.

19. The method of claim 16, wherein the issuing the command to output the digital display identification data when the DVI connector is identified as a DVI-D-type connector by the connector type identification unit comprises issuing a command to output the digital display identification data according to predetermined additional information when the DVI connector is identified as the DVI-I-type connector.

20. The method of claim 19, wherein the additional information indicates that the digital display identification data is to be output according to a user selection.

21. A computer-readable recording medium having computer-executable instructions stored thereon, to output different display identification data depending on a connector type, the computer-executable instructions comprising:

storing predetermined analog display identification data;

storing predetermined digital display identification data;

identifying the connector type based upon an output of pins of a predetermined connector;

issuing a command to output one of the predetermined analog display identification data and the predetermined digital display identification data depending on an identified connector type;

outputting the stored predetermined analog display identification data in response to the command to output the stored predetermined analog display identification data; and outputting the stored predetermined digital display identification data in response to the command to output the stored predetermined digital display identification data.

22. The computer-readable recording medium of claim 21, wherein the stored predetermined analog display identification data and the stored predetermined digital display identification data have a predetermined structure according to EDID specifications of the VESA.

23. The computer-readable recording medium of claim 21, wherein the predetermined connector is a DVI connector.

24. The computer-readable recording medium of claim 23, wherein in identifying the connector type based upon the output of pins of the predetermined connector, the DVI connector is identified as one of a DVI-A-type, a DVI-D-type, and a DVI-I-type connector based on the output of pins of the DVI connector.

25. The computer-readable recording medium of claim 24, wherein the identifying the connector type based upon the output of pins of the predetermined connector comprises:

identifying the DVI connector as a DVI-A-type connector when the output of a 22nd of the DVI connector of a Terminal Display Management System clock ground is at a high impedance and the output of a C5-th pin of the DVI connector of an analog ground is at a ground level;

identifying the DVI connector as a DVI-D-type connector when the output of the 22nd of the DVI connector of the Terminal Display Management System clock ground is at a ground level and the output of the C5-th pin of the DVI connector of the analog ground is at a high impedance level; and

identifying the DVI connector as a DVI-I-type connector when the output of the 22nd of the DVI connector of the Terminal Display Management System clock ground and the output of the C5-th pin of the DVI connector of the analog ground are at a ground level.

26. The computer-readable recording medium of claim 24, wherein issuing a command to output one of the predetermined analog display identification data and the predetermined digital display identification data depending on the identified connector type comprises:

issuing a command to output the analog display identification data when the DVI connector is identified as the DVI-A-type connector by the connector type identification unit; and

issuing a command to output the digital display identification data when the DVI connector is identified as the DVI-D-type connector by the connector type identification unit.

27. The computer-readable recording medium of claim 26, wherein in issuing a command to output the analog display identification data when the DVI connector is identified as a DVI-A-type connector by the connector type identification unit, a command to output the analog display identification data is issued according to predetermined additional information when the DVI connector is identified as the DVI-I-type connector.

28. The computer-readable recording medium of claim 27, wherein the predetermined additional information indicates that the analog display identification data is to be output according to a user selection.

29. The computer-readable recording medium of claim 26, wherein in issuing a command to output the digital display identification data when the DVI connector is identified as the DVI-D-type connector by the connector type identification unit, a command to output the digital display identification data is issued according to predetermined additional information when the DVI connector is identified as the DVI-I-type connector.

30. The computer-readable recording medium of claim 29, wherein the additional information indicates that the digital display identification data is to be output according to a user selection.

31. An apparatus to output different display identification data depending on a connector type, comprising:

a data storage unit to store analog display identification data and digital display identification data;

a connector type identification unit which identifies a connector type based upon an output of pins of a predetermined connector; and

a display identification data output command unit which commands the data storage unit to output one of: the analog display identification data and the digital display identification data based upon the identified connector type.

32. The apparatus of claim 31, wherein the data storage unit comprises:

an analog display identification data storing and outputting unit which stores predetermined analog display identification data and outputs the stored analog display identification data to a predetermined system when a command to output the analog display identification data is issued; and

a digital display identification data storing and outputting unit which stores predetermined digital display identification data and outputs the stored digital display identification data to the predetermined system when a command to output the analog display identification data is issued.

33. The apparatus of claim 31, wherein the analog display identification data and the digital display identification data have a predetermined structure according to EDID specifications of the VESA.

34. The apparatus of claim 31, wherein the predetermined connector is a DVI connector.

35. The apparatus of claim 34, wherein the connector type identification unit identifies the DVI connector as one of a DVI-A-type, a DVI-D-type, and a DVI-I-type connector based on the output of pins of the DVI connector.

36. The apparatus of claim 35, wherein the connector type identification unit comprises:

a DVI-A-type identifier which identifies the DVI connector as a DVI-A-type connector when an output of a 22nd of the DVI connector of a Terminal Display Management System clock ground is at a high impedance and an output of a C5-th pin of the DVI connector of an analog ground is at a ground level;

a DVI-D-type identifier which identifies the DVI connector as a DVI-D-type connector when the output of the 22nd of the DVI connector of the Terminal Display Management System clock ground is at a ground level and the output of the C5-th pin of the DVI connector of the analog ground is at a high impedance level; and

a DVI-I-type identifier which identifies the DVI connector as a DVI-I-type connector when the output of the 22nd of the DVI connector of the Terminal Display Management System clock ground and the output of the C5-th pin of the DVI connector of the analog ground are at a ground level.

37. The apparatus of claim 35, wherein the display identification data output command unit comprises:

an analog display identification data output commander which commands the analog display identification data storing and outputting unit to output the analog display identification data when the DVI connector is identified as the DVI-A-type connector by the connector type identification unit; and

a digital display identification data output commander which commands the digital display identification data storing and outputting unit to output the digital display identification data when the DVI connector is identified as the DVI-D-type connector by the connector type identification unit.

38. The apparatus of claim 37, wherein the analog display identification data output commander commands the analog display identification data storing and outputting unit to output the analog display identification data according to predetermined additional information when the DVI connector is identified as the DVI-I-type connector by the connector type identification unit.

39. The apparatus of claim 38, wherein the additional information indicates that the analog display identification data is to be output according to a user selection.

40. The apparatus of claim 37, wherein the digital display identification data output commander commands the digital display identification data storing and outputting unit to output the digital display identification data according to predetermined additional information when the DVI connector is identified as the DVI-I-type connector by the connector type identification unit.

41. The apparatus of claim 40, wherein the predetermined additional information indicates that the digital display identification data is to be output according to a user selection.